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Abstract

An oscilloscope that is capable of displaying simultaneously multiple waveforms representing time evolution of a signal during respective acquisition intervals acquires waveform data using a first set of acquisition parameters and generates a display based on that waveform data. If the display includes a waveform that is visually distinct from other displayed waveforms, the user selects a feature that distinguishes the visually distinct waveform from other displayed waveforms. The oscilloscope automatically derives updated acquisition parameters that discriminate between the selected feature and other features of the displayed waveforms. The oscilloscope then acquires waveform data using the updated acquisition parameters and generates a display based on that waveform data.